

ABSTRACT OF THE DISCLOSURE

An optical function module for bi-directional wavelength-division multiplexer (WDM) optical communication system comprises at least one wavelength managing module, and at least one uni-directional optical function module. The wavelength managing module has a plurality of ports, and optically couples between a first optical transceiver and a second optical transceiver, wherein the first and the second optical transceivers provides a first and a second optical channels respectively for transmitting a plurality of optical signals with different wavelengths. The uni-directional optical function module has a high isolation function, and couples to the ports of the wavelength managing module. In addition, the uni-directional optical function module with high isolation can be replaced by an uni-directional optical function module without high isolation and an optical isolator.